

## CLAIMS

### I CLAIM:

1. A computer-implemented method of transferring information between a user and a third party through a centralized computer having a product information database, comprising the steps of:

receiving, at the centralized computer, product identification information identifying a product from a user;

storing the product identification information in said product information database and establishing a link between said product and said user;

receiving, at the centralized computer, product update information on said product from a third party;

updating, by the centralized computer, said product information database with said product update information;

reviewing, by the centralized computer, the product information database to identify user-product links associated with said product;

transmitting, on an automated basis, an electronic message containing said product update information to all users identified as having user-product links.

2. The method as set forth in claim1, further comprising the steps of:

reviewing, by the centralized computer, the product information database for information relating to the product; and

notifying the user of any information relating to the product.

3. The method as set forth in claim 1, wherein the product update information is a finding that the product is harmful and said electronic message includes a warning and instructions regarding the product to the users having user-product links.

4. The method as set forth in claim 1, further comprising the steps of:

searching, upon user request, the product information database for alert information on the product; and

transmitting to the user any alert information pertaining to the product.

5. The method as set forth in claim 1, further comprising, before the first step of receiving, the steps of:

entering the product identification information into a remote terminal;  
and

electronically transmitting the product identification information to the centralized computer.

6. The method as set forth in claim 2, wherein the remote terminal is a point-of-sale terminal and the product identification information is entered by scanning a product bar code.

7. The method as set forth in claim 1, further comprising the step of verifying that the user is a user registered with the centralized computer.

8. The method as set forth in claim 7, said step of verifying including the use of biometric identification devices.

9. A computer-implemented method of transferring information between a user and a third party through a centralized computer, comprising the steps of:

receiving, at the centralized computer, user identification information including biometric data and currently used products from a user;

storing the user identification information in a database;

associating the stored user identification information with a username for said user;

receiving, at the centralized computer, product information pertaining to a product;

reviewing, by the centralized computer, the database for product identification information correlating with said product information;

comparing any product identification information located with the stored user identification information for said user to identify any association between the user identification information, including biometric data and currently used products, and said product information;

transmitting a message to said user regarding said product.

10. The method as set forth in claim 9, further comprising the steps of:

storing, in response to a user purchase of said product, product identification information for said product under said username;

receiving, at the centralized computer, product update information on said product;

reviewing, by said centralized computer, the database for product identification information correlating with said product update information;

identifying the username as linked with the product;

transmitting a message to said username with said product update information.

11. The method as set forth in claim 9, further comprising the step of:

identifying a conflict between said user identification information and said product information, wherein said message contains a warning to said user.

12. The method as set forth in claim 9, further comprising, before the second step of receiving, the steps of:

entering the product information into a remote terminal; and

electronically transmitting the product information to the centralized computer.

13. The method as set forth in claim 12, wherein the remote terminal is a point-of-sale terminal and the product information is entered by scanning a product bar code.

14. The method as set forth in claim 9, wherein the currently used products include prescribed prescriptions.

15. The method as set forth in claim 9, wherein the product information received at the centralized computer is product purchase information from a user, and said message to said user includes a purchase recommendation for the product.

16. The method as set forth in claim 15, further comprising the step of:

identifying a conflict between said user identification information and said product purchase information, wherein said message contains a negative purchase recommendation.

17. A computer-implemented method of transferring information between a user and a third party through a centralized computer, comprising the steps of:

receiving, at the centralized computer, product information and user identification information from a user;

linking and storing the product information and user identification information in a product database;

receiving, at the centralized computer, user biometric information;

linking and storing the user biometric information in a user information database;

comparing, by the centralized computer, the user biometric information with normal values and notifying the user of a comparison result;

reviewing, by the centralized computer, the product database for product identification information indicating a conflict with said user biometric information;

transmitting, in response to a correlation between said product identification information, said user biometric information and a stored health condition, an automated message to said user.

18. The method as set forth in claim 17, further comprising the steps of:

receiving, at the centralized computer, product update information on a product from a third party;

updating, by the centralized computer, said product database with said product update information;

reviewing, by the centralized computer, the product database to identify user-product links associated with said product;

reviewing the user information database for biometric information linked with said product;

transmitting, on an automated basis, an electronic message containing said product update information to all users identified as having user-product links; and

transmitting, on an automated basis, an electronic message containing said product update information to all users identified as having biometric information linked with said product.

19. The method as set forth in claim 18, wherein the product update information is a finding that the product is harmful and said electronic messages include a warning and instructions regarding the product to the users having user-product links and the users identified as having biometric information linked with said product.

20. The method as set forth in claim 17, further comprising the steps of:

reviewing, by the centralized computer, the user information database for a date of a last received user biometric information input;

comparing an interval since the date of said last received user biometric information input with a stored interval value;

notifying, in response to said interval being greater than said stored interval value, the user electronically that a next user biometric information input is past due.

21. A computer-implemented method of transferring information between a user and a third party through a centralized computer having a product information database and an interaction database, comprising the steps of:

receiving, at the centralized computer, product identification information identifying a first product from a user;

storing the product identification information in said product information database and establishing a link between said first product and said user;

receiving, at the centralized computer, product identification information identifying a second product from said user;

searching, by the centralized computer, said interaction database for any stored information identifying a relationship between said first product and said second product; and

transmitting, on an automated basis, an electronic message containing any relationship information to said user.



22. The method as set forth in claim 21, further comprising the steps of:

reviewing, by the centralized computer, a user information database to identify any user biometric data relating to at least one of said first product, said second product and any relationship;

transmitting information derived from said user information database indicating a relationship between user biometric data and at least one of said first product, said second product and any relationship therebetween with said electronic message.

23. The method as set forth in claim 21, further comprising the steps of:

reviewing, by the centralized computer, responsive to receiving product identification information, the product information database for information relating to at least one of said first product and said second product; and

notifying the user of any information stored in said product information database and relating to at least one of said first product and said second product.

24. The method as set forth in claim 22, further comprising the steps of:

reviewing, by the centralized computer, responsive to receiving product identification information, the product information database for information relating to at least one of said first product and said second product;

comparing, by the centralized computer, any information located in said product information database relating to at least one of said first and second products with user biometric data stored in said user information database; and

notifying the user of any information stored in said product information database which relates to at least one of said first product and said second product and which is also related to said user biometric data.

25. A computer-implemented method of transferring information between a user and a third party through a communications network, comprising the steps of:

maintaining a plurality of databases with a central server, said plurality of databases including a product database, a user database, and an interaction database;

receiving product purchase information from a plurality of users over the communications network, each product purchased being entered into said product database and linked with a user;

receiving user biometric information from said plurality of users, each user's biometric information being linked with said each user, respectively, and stored in said user database;

receiving, by said central server, a product recall notification for a defective product from a third party computer over the communications network;

reviewing, by said central server, said product database for product identification information on said defective product;

identifying users linked with said defective product through product purchase information;

generating, on an automated basis, electronic messages with said product recall notification; and

transmitting over said communications network, on an automated basis, said electronic messages to all users identified as linked with said defective product.

26. The method as set forth in claim 25, further comprising the steps of:

receiving, by said central server, product interaction data from a plurality of third party computer devices over said communications network;

storing said product interaction data in said interaction database.

27. The method as set forth in claim 25, further comprising the steps of:

reviewing, by said central server, said user database for biometric information linked with said defective product; and

generating and transmitting over said communications network, on an automated basis, electronic messages with said product recall notification to users having biometric information linked with said defective product.

28. The method as set forth in claim 25, further comprising the steps of:

reviewing, by the central server, said product database to identify user-product links;

comparing, by the central server, said user-product links with stored product interaction data;

notifying, by the central server through the communications network, users found to have links with at least two products identified in the interaction database as having an interaction.

29. The method as set forth in claim 28, wherein said users are notified by at least one of email, autodialing and paging.

30. The method as set forth in claim 28, further comprising the steps of:

identifying a link between said stored product interaction data and a user;

determining, by the central server using stored data, a hazard risk to the user arising from said link; and

dispatching, through said communications network, an alert message to an emergency medical service for immediate contact with said user.

31. The method as set forth in claim 25, wherein said user biometric information is received electronically from health monitoring devices including at least one of blood glucose, temperature, eye pressure and blood pressure devices.

32. The method as set forth in claim 26, wherein said plurality of third party computer devices include providers of health care (PHC) computers.

33. The method as set forth in claim 25, wherein said third party computer is a recall and information source (RIS).

34. A computerized information distribution system comprising:

- a remote terminal for receiving user identification information and for registering a user;
- a central server for storing product identifiers corresponding to the user;
- a communications network for receiving product information from a plurality of third party computers;
- means for storing said product information at said central server;
- a search engine for matching the product identifiers with the product information;

means for generating a messages corresponding to said product identifiers and information matching; and

means for transmitting said message to the user over said communications network.

35. The system as set forth in claim 34, wherein said remote terminal is an IECLD.

36. The system as set forth in claim 35, said IECLD including:

a display;

data entry means;

memory means;

processing means; and

communication means.

37. The system as set forth in claim 36, wherein the data entry means includes at least one of a keypad, a keyboard, and a bar code scanner.

38. The system as set forth in claim 36, wherein the communications means includes a modem.

39. The system as set forth in claim 34, wherein said means for storing is a plurality of databases.

40. The system as set forth in claim 39 wherein said plurality of databases includes at least one of a user database, a product database, a product information database, an interaction database, a product usage database and a biological variables database.

41. The system as set forth in claim 34, wherein the user is at least one of a doctor, a pharmacy, a laboratory and a patient.

42. A computer-implemented method of transferring product information between a user and a centralized computer, comprising the steps of:

inputting, at a point of transaction terminal, product information for products being acquired through said point of transaction terminal;

inputting, at said point of transaction terminal, user information from an acquiring user;

transmitting said user information to the centralized computer over a communications channel;

verifying, at the centralized computer, that the user is a registered user authorizing data transfer;

requesting, by said centralized computer in response to positive verification of said user, data transfer from said point of transaction terminal;

transmitting, from said point of transaction terminal to said centralized computer, said product information for said products being acquired;

storing said product information at said centralized computer and establishing a link between said product information and said user.

43. The method as set forth in claim 42, wherein the second step of inputting includes the step of swiping a user credit card through a credit card reader, said user information being magnetically stored on said credit card.

44. The method as set forth in claim 42, further comprising, upon positive verification of said user as registered, the steps of:

searching the centralized computer for alert information relating to the product information; and

transmitting to the user, over said communications channel, any alert information pertaining to the products being acquired.

45. The method as set forth in claim 42, wherein the product information is entered by scanning a product bar code.



46. The method as set forth in claim 42, said step of verifying including the use of biometric identification devices.

47. An apparatus for facilitating identification and location of a harmful or recalled product, comprising:

a storage device;

a communication device; and

a processor connected to the communication device and said storage device;

said storage device storing a database including data on a plurality of products and on users of said products, and a program for controlling said processor, said processor operative with said program to receive recall or warning information from a third party about a product, to receive product identification information linked to a particular user, to generate a message to at least one of the users linked to a product according to the recall or warning information about said product received from said third party, and to transmit the message to at least one of the users linked to said product using the communication device.

48. The apparatus of claim 47, wherein said processor being further operative with said program to transmit said message to a third party including at least one of a doctor, pharmacy, laboratory, insurance company, hospital and emergency medical service.

49. The apparatus of claim 47, wherein said processor being further operative with said program to receive product identification information linked to a user from at least one terminal.

50. The apparatus of claim 49, wherein said terminal is a computer terminal at a point of sale.

51. The apparatus of claim 50, wherein said computer terminal at the point of sale includes a credit card reader.

52. The apparatus of claim 50, wherein said computer terminal at the point of sale includes a bar code reader.

53. The apparatus of claim 47, wherein said processor is further operative with the program to receive product identification information linked to a user from at least one terminal using a distributed computer network.

54. The apparatus of claim 53, wherein said terminal is a user's computer.

55. The apparatus of claim 47, wherein said processor is further operative with the program to receive and store biometric data from a plurality of biometric devices measuring biological variables of a user.

56. The apparatus of claim 47, wherein said processor is further operative with the program to determine if there is recall or warning information available regarding said product.

57. The apparatus of claim 56, wherein said processor is further operative with the program to provide a user with information on a replacement product to a recalled product.

58. The apparatus of claim 47, wherein said processor is further operative with the program to determine if there is an interaction among products stored for the particular user.

59. The apparatus of claim 55, wherein said processor is further operative with the program to determine if there is an interaction among products stored for the user and biometric data stored for said user.

60. The apparatus of claim 55, wherein said processor is further operative with the program to determine if the biometric data has been timely monitored.

61. The apparatus of claim 60, wherein said processor is further operative with the program to provide a user with instructions on timely monitoring.

62. An article of manufacture including a computer readable medium having code for a computer readable program embodied therein, said computer readable program comprising:

- means for storing at least one user identification and a product used by said user;

- means for storing at least one product and information about said product;

- means for receiving indicia that identifies said product being stored;

- means for receiving updated recall and warning information about said product;

- means for matching said updated recall or warning information to at least one of a plurality of products being stored;

- means for creating a message based upon said matching between updated recall or warning information and products being stored;

- means for initiating a connection with said user of a product based upon said matching; and

- means for transmitting said message to said user of the product.

63. The article of manufacture of claim 62, wherein the means for initiating a connection includes a communications company.

64. The article of manufacture of claim 63, wherein the communications company establishes communication with a cellular telephone or a cellular-enabled device.

65. A computer program tool comprising:

a computer usable medium having computer readable code embodied therein for establishing a match between recall or warning information about a product or biometric data and a of said product , the computer readable code comprising:

code module for receiving information from a third party computer, including at least one of the user, recall and information sources, point of sale, and providers of health care;

code module for sending a message to a third party computer including at least one of the user, provider of health care, and recall and information sources;

code module for security including at least one of user ID, password, and encryption/decryption; and

code module for general administration including configuration of other code modules and database management.

66. A device for acquiring data comprising:

means for acquiring data;

a processor; and

a memory connected to the processor and storing a program for controlling operation of the processor;

said processor operative with the program in the memory to receive user data, the data being at least one of product identification and biometric data, determine if the data received interacts with products being stored in the memory, and display the interaction information.

67. The device of claim 66, where said further comprising means for transmitting data.

68. The device of claim 67, wherein the means for transmitting data includes a distributed computer network.

69. The device of claim 66, wherein the means for acquiring data includes a bar code reader.

70. In a system to monitor products purchased by a user in which an identification card having a code recorded thereon is applied as linking the products purchased to the user identified by the card to enable identification of the user as participating in a recall and warning notification program, the system comprising:

- a checkout station;

- an identification card having recorded thereon an identification code indicating the user as participating in the recall and warning notification program;

- a card reader at said checkout station and operated for reading the identification code indicating the user as participating in the recall and notification program;

- a data input device at said checkout station for inputting data representing the products being purchased by said user;

- a storage device for storing the data acquired at said checkout station;

- a communication device for transmitting the acquired data; and

- a display device for displaying the acquired data.

71. In a system to monitor products purchased by a user in which an identification card having a code recorded thereon is applied as linking the products purchased to the user identified by the card to enable identification of the user as participating in a recall and warning notification program, the system comprising:

- a checkout station;

an identification card having recorded thereon an identification code indicating the user as participating in a recall and warning notification program;

a data input device at said checkout station for inputting data representing the products being purchased by said user; and

a card writer at said checkout station and operated for writing indicia onto the card representing the products purchased by said user.

72. The system of claim 70, wherein the identification code of said identification card is magnetically encoded on a magnetic stripe.

73. The system of claim 70, wherein the identification code of said identification card is optically encoded as a bar code.

74. A system for bi-directional transmission of signals between two wired or wireless, portable devices to allow at least one of product identification data and biometric data to be exchanged between the two devices with said product information data comprising at least one of drugs, food, cosmetics, and medical devices information being stored in a memory of said portable devices, operative with a processor in said portable device.

75. The system of claim 74, wherein the transmission further includes bi-directional transmission between at least one of the portable devices and a centralized computer.

76. The system of claim 74, wherein the portable device is a IECLD.

77. An apparatus comprising:

a hand-held device for entering and storing product information data and biometric data;

a data entering device for entry of data into said hand-held device;

a processor for identifying an interaction between product information and biometric data; and

[illegible]

79. The apparatus of claim 77, wherein said data entering device includes at least one of a bar code reader, optical transceiver, key means, and a radio frequency transceiver.